

## The authorship and type locality of *Phalacrocorax carbo sinensis*

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Great Cormorant *Phalacrocorax carbo* (Linnaeus, 1758) is a common and widespread polytypic species of the Palearctic fauna. The continental subspecies, ranging from Western Europe to east and south-east Asia, is generally known under the name *sinensis* (Vaurie 1965, Dorst & Mougín 1979, Orta 1992, Johnsgard 1993).

The specific name *sinensis* has been often attributed to Shaw & Nodder (1802), where it appeared in the Latin text accompanying their plate 529 (unpaginated) in the binomen *Pelecanus sinensis* (e.g. Dresser 1903: 555, Hartert 1920: 1390, Peters 1931: 87), although Giebel (1877: 84) had previously attributed it to Latham (1801: lxx), an earlier source. For the dates of publication of Shaw & Nodder's work, see Sherborn (1895), Dickinson *et al.* (2006) and Peterson (2011). Sherborn (1924: 906) observed that the name had been used still earlier by Blumenbach (1798), in the text accompanying his plate 25 (unpaginated), also in the binomen *Pelecanus sinensis*. As a result, authorship has been widely accredited to Blumenbach in current ornithological literature (e.g. Vaurie 1965: 48, Dorst & Mougín 1979: 166, Dickinson 2003: 91). Dorst & Mougín (1979: 166) believed that *Pelecanus sinensis* of Blumenbach (1798) and of Shaw & Nodder (1802) were independent names and therefore homonyms.

I should also point out that *Pelecanus sinensis* of Turton (1800: 351) antedates Shaw & Nodder's (1802) use of this name, but I have found no authority that attributes the name to Turton (1800).

My search of literature now reveals that the species was described still earlier than currently understood. Both Shaw & Nodder (1802) and Blumenbach (1798) referred in their descriptions to earlier sources. Shaw & Nodder (1802: English text accompanying pl. 529) referred to 'Staunton's Chinese Embassy, 2. p. 388', and Blumenbach (1798: text accompanying pl. 25) described the bird 'nach den Nachrichten [...], die in der prachtvollen Reisebeschreibung der neulichen englischen Gesandtschaft nach Schina [...] gegeben worden'. This, in translation, states: 'on the basis of reports presented in the splendid travelogue of the recent English embassy to China'. In addition, Shaw (1809: 243) remarked that the species was 'described and figured in Sir G. Staunton's Embassy to China'. All of these citations refer to the Macartney Embassy, headed by George Macartney (1737–1806), British politician, which ran from 1792–94 (Robbins 1908, Cranmer-Byng 1958, 1962).

The official and most comprehensive travelogue resulting from the Macartney Embassy was written by George Staunton (1737–1801), Irish-born and French-educated British Jesuit priest, physician, naturalist and diplomat, who participated in the Macartney Embassy (Reed & Demattè 2007: 156). The work was published in 1797 in a two-volume quarto edition (Staunton 1797a,b) and a three-volume octavo edition (Staunton 1797c,d,e). In addition, a folio atlas (Staunton 1796), with 44 maps and plates, was published on 12 April 1796 (British Library 2011). See Cranmer-Byng (1962) for other first-hand accounts of this Embassy.

The atlas (Staunton 1796: pl. 37) contains a detailed, full-page drawing of a juvenile Great Cormorant, copies of which appeared both in Blumenbach (1798: pl. 25) and Shaw & Nodder (1802: pl. 529). Staunton's pl. 37 bears the inscription 'The *Pelicanus* [sic] *sinensis*

or Fishing Corvorant [*sic*] of China' (my italics). The name appeared also in the chapter entitled 'A list of plates contained in the folio volume' in Staunton (1797b: xxvii), where it was accompanied by a detailed description, and in Staunton (1797e: 242) without description. A binominal name published before 1931 in association with an illustration is available for nomenclatural purposes (Art. 12.2.7 of ICZN 1999). The atlas was published prior to the text volumes of Staunton's work (see above), and the specific name *sinensis* thus dates from that work in 1796.

Staunton (1797b: 388) published an account of the morphological characteristics of the cormorant (in quotation marks), describing the bird as 'a species of the pelican, resembling the common corvorant', not using a Latin name. He also attributed the species to Shaw, remarking that Shaw 'has distinguished' the form on the basis of 'a specimen submitted [to him]'. 'Doctor Shaw', i.e. George Shaw (1751–1813), English naturalist and author of the *Naturalists' miscellany*, thus may have suggested to Staunton that the cormorant brought by the latter from China was specifically different from the British cormorant and probably provided the morphological diagnosis. However, there is no evidence that he coined the name *sinensis*. On the contrary, the absence of this name from the book section where Staunton (1797b) published Shaw's description and the fact that Shaw & Nodder (1802: Latin text associated with their pl. 529) stated 'auctor est Dominus Stauntonus' ('the author is Mr Staunton') indicate that the authorship of the name in the sense of the *International code of zoological nomenclature* (ICZN 1999: Art. 50.1) should be credited to Staunton.

Staunton (1796: pl. 37) published the specific name in combination with the generic name *Pelicanus*. He used the latter spelling also in another place in his travelogue (Staunton 1797b: xxvii), but there is no evidence that he deliberately emended the *Pelecanus* of Linnaeus (1758: 132). His *Pelicanus* should thus be considered an incorrect subsequent spelling, which, being not in prevailing use, has no standing in zoological nomenclature (Art. 33.3 of ICZN 1999).

The specimen 'submitted' by Staunton to Shaw (see above) can be regarded as the holotype of *Pelecanus sinensis* in the absence of any evidence to the contrary. Its current whereabouts is unknown and it has probably perished. Shaw's bird collection was deposited in the British Museum of Natural History (now the Natural History Museum at Tring) (Steinheimer 2003: 54), but no matching specimen appears to have survived (Ogilvie-Grant 1898).

The type locality of *Pelecanus sinensis* was given simply as 'China' by Staunton (1796: pl. 37, 1797b: xxvii), Blumenbach (1798: text accompanying pl. 25) and Shaw & Nodder (1802: text accompanying pl. 529). 'China' has been listed as the type locality of *P. sinensis* in standard modern references as well (e.g. Vaurie 1965: 48, Dorst & Mougín 1979: 166). Staunton (1797a: 335, 1797c: 381) mentioned that the Macartney Embassy first briefly encountered cormorants ('that celebrated bird, vulgarly called the pelican of the wilderness') in the Turon Bay in Cochin-China (now Da-Nang Bay, Vietnam; c.10°06'N, 108°11'E). However, a more detailed account of cormorants is found in a section describing the voyage through the Grand Canal from Beijing south, when the Macartney Embassy crossed the 'lake Wee-chaung-hoo' (Staunton 1797b: 388 ff., 1797e: 242ff.), i.e. Lake Weishan. Staunton (1797b: 388, 1797e: 242) mentioned that this was 'the place where the Leu-tze, or famed fishing bird of China, is bred, and instructed in the art and practice of supplying his owner with fish in great abundance'. I have found no other places in Staunton's travelogue where cormorants were mentioned. Although direct evidence is lacking, I consider it highly probable that the holotype brought by the Macartney Embassy to Europe originated from this lake. Staunton's (1797b,e) itinerary (see also Barrow 1804; John Barrow, 1764–1848, English politician, also participated in the Macartney Embassy to China) indicates that the

Macartney Embassy obtained the bird there in November 1793. Considering these data I restrict here the type locality of *Pelecanus sinensis* to Lake Weishan, Shandong Province, China (c.35°00'N, 116°50'E).

In summary, I conclude that *Pelecanus sinensis* was described by Staunton (1796: pl. 37) from a single specimen obtained by the Macartney Embassy to China in November 1793 at Lake Weishan, China. The subspecies authorship thus becomes *Phalacrocorax carbo sinensis* (Staunton, 1796).

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